October 2005 - Review of Weather Including Temperatures and Precipitation for the Quad State Region.

Weather Summary for October 2005

Precipitation

October's weather was quiet compared to recent months. Temperatures were up to 2 degrees above normal (57 to 59 degrees). Rainfall ranged from 2 to almost 3.5 inches below normal. At Paducah, only 0.11 inches fell during October. This was the second driest October on record; the driest was October 1964 when no measurable rain fell. It also tied as the 3rd driest month on record. All climatic regions are considered dry but none have reached drought status on the Palmer Drought Severity Index.

High pressure was in control of the region for the first half of October. Only trace amounts of rain would fall through mid-month and then only in the northern-most counties. There were two reasons for so little rain. The first was that while several surface cold fronts passed across the region allowing temperatures to drop, there was never enough moisture available for rain. The second reason was found in the upper levels of the atmosphere. While several upper level disturbances moved through the region, they were displaced from the main jet and any dynamics that would have allowed for shower and thunderstorm development (if there wase enough moisture available).

The second half of the month was little more progressive. In the upper levels, weak northwest flow was followed by a large carving out of a trof across the eastern half of the country. A surface cold front approached the region on the 20th. An area of low pressure developed along this front and showers and thunderstorms developed. Rain amounts were generally less than one-half inch but there were isolated areas of up to one inch. A reinforcing cold front on the 23rd brought the area's first taste of fall with highs in the 50s and lows in the 30s. A few showers accompanied this front with amounts less than one-quarter inch. High pressure then built over the area allowing for a gradual warmup through the end of the month. A weak cold front approached on the 31st touching off a few light showers before midnight. Trick-or-treaters didn't get too wet with amounts less than one-tenth of an inch.

Figure 1. October 2005 Average Daily Temperature Summaries (Degrees F) for Several Quad State Region Locations.

LOCATION	TEMPERATURES	<u>HIGH</u>	<u>LOW</u>	<u>AVERAGE</u>
Carbondale Illinois	Normal (94 years)	69.7	42.3	56.2
	2005	71.7	44.1	57.9
CapeGirardeau Missouri	Normal (30 years)	70.4	46.7	58.8
	2005	71.7	44.9	58.3

Evansville	Normal (30 years)	69.6	45.4	57.8
Indiana				
	2005	70.4	47.4	59.0
Paducah	Normal (30 years)	71.0	46.8	59.2
Kentucky				
	2005	71.8	46.4	59.1
Poplar Bluff	Normal (30 years)	71.6	46.2	59.2
Missouri				
	2005	71.6	46.2	59.7

Figure 2. October Average Monthly Precipitation (inches) and 2005 Observed Precipitation for Several Quad State Region Locations.

<u>LOCATION</u>		TOTAL PRECIPITATION	2005 DEPARTURE	
		(includes melted snow)	FROM NORMAL	
Carbondale	Normal:	2.76		
Illinois			-1.83	
	2005:	0.93		
Cape Girardeau	Normal:	3.19		
Missouri			-2.29	
	2005:	0.90		
Evansville	Normal:	2.82		
Indiana			-2.09	
	2005:	0.73		
Paducah	Normal:	3.45		
Kentucky			-3.34	
	2005:	0.11		
Poplar Bluff	Normal:	3.30		
Missouri			-3.17	
	2005:	0.13		